their adherence to widely accepted privacy policies and practices. In addition, policies and practices should be adapted for the particular types of personal information data being collected and/or accessed and adapted to applicable laws and standards, including jurisdiction-specific considerations. For instance, in the US, collection of or access to certain health data may be governed by federal and/or state laws, such as the Health Insurance Portability and Accountability Act (HIPAA); whereas health data in other countries may be subject to other regulations and policies and should be handled accordingly. Hence different privacy practices should be maintained for different personal data types in each country.

[0343] Despite the foregoing, the present disclosure also contemplates embodiments in which users selectively block the use of, or access to, personal information data. That is, the present disclosure contemplates that hardware and/or software elements can be provided to prevent or block access to such personal information data. For example, in the case of collecting usage pattern of a user's activities, the present technology can be configured to allow users to select to "opt in" or "opt out" of participation in the collection of personal information data before or during such a collection. In another example, users can select not to provide or share the users' activities information. In yet another example, users can select to limit the length of time the users' activities information is maintained or entirely prohibit the development of the usage pattern based on the activities information. In addition to providing "opt in" and "opt out" options, the present disclosure contemplates providing notifications relating to the access or use of personal information. For instance, a user may be notified upon downloading an app that their personal information data will be accessed and then reminded again just before personal information data is accessed by the app.

[0344] Moreover, it is the intent of the present disclosure that personal information data should be managed and handled in a way to minimize risks of unintentional or unauthorized access or use. Risk can be minimized by limiting the collection of data and deleting data once it is no longer needed. In addition, and when applicable, including in certain health related applications, data de-identification can be used to protect a user's privacy. De-identification may be facilitated, when appropriate, by removing specific identifiers (e.g., date of birth, etc.), controlling the amount or specificity of data stored (e.g., collecting location data at a city level rather than at an address level), controlling how data is stored (e.g., aggregating data across users), and/or other methods.

[0345] Therefore, although the present disclosure broadly covers use of personal information data to implement one or more various disclosed embodiments, the present disclosure also contemplates that the various embodiments can also be implemented without the need for accessing such personal information data. That is, the various embodiments of the present technology are not rendered inoperable due to the lack of all or a portion of such personal information data. For example, the likelihood that a user utterance is directed to a virtual assistant can be estimated based on non-personal information data or a bare minimum amount of personal information, such as the content being requested by the device associated with a user, other non-personal information available to the virtual assistant, or publically available information.

What is claimed is:

1. An electronic device, comprising:
one or more processors;
a microphone; and
memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for:
receiving, via the microphone, a first audio stream including one or more utterances;
determining whether the first audio stream includes a lexical trigger;
in accordance with a determination that the first audio stream includes the lexical trigger, generating one or more candidate text representations of the one or more utterances;
determining whether at least one candidate text representation of the one or more candidate text representations is to be disregarded by the virtual assistant;
in accordance with a determination that at least one candidate text representation is to be disregarded by the virtual assistant, generating one or more candidate intents based on candidate text representations of the one or more candidate text representations other than the to be disregarded at least one candidate text representation;
determining whether the one or more candidate intents include at least one actionable intent;
in accordance with a determination that the one or more candidate intents include at least one actionable intent, executing the at least one actionable intent;
outputting a result of the execution of the at least one actionable intent.

2. The electronic device of claim 1, wherein the lexical trigger is a single-word lexical trigger.

3. The electronic device of claim 2, wherein the first audio stream includes a first utterance, and wherein the single-word lexical trigger is positioned in a portion of the first utterance other than the beginning portion of the first utterance.

4. The electronic device of claim 1, wherein determining whether the first audio stream includes a lexical trigger comprises:
detecting a beginning point of the first audio stream;
detecting an end point of the first audio stream; and
determining whether a lexical trigger is included between the beginning point and the end point of the first audio stream.

5. The electronic device of claim 4, wherein detecting the beginning point of the first audio stream comprises:
detecting, via the microphone, an absence of voice activity before receiving the first audio stream;
determining whether the absence of voice activity before receiving the first audio stream exceeds a first threshold period of time; and
in accordance with a determination that the absence of voice activity exceeds the first threshold period of time, determining the beginning point of the first audio stream based on the absence of voice activity before receiving the first audio stream.

6. The electronic device of claim 4, wherein detecting the end point of the first audio stream comprises:
detecting, via the microphone, an absence of voice activity after receiving the one or more utterances of the first audio stream;